# ECAT Mathematics Chapter 8 Sequences and Series

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | If three unequal numbers p, q, r are in H.P. and their squares are in A.P., then the ration p : q : r is | |
| 2 | If a, b, c are in AP., a, b, c are in G.P. then A, $m^2$b, c are in | A. A.P.<br>B. G.P.<br>C. H.P.<br>D. None of these |
| 3 | G is geometric mean between a and b if a, G, b is | A. A.P.<br>B. G.P.<br>C. H.P.<br>D. None of these |
| 4 | Question Image | |
| 5 | Question Image | |
| 6 | The third term of a G.P. is the square of first term. If the second term is 8, then the 6th term is | A. 120<br>B. 124<br>C. 128<br>D. 132 |
| 7 | Which one represents a sequence | A. an<br>B. Sn<br>C. a(n)<br>D. {an} |
| 8 | Question Image | |
| 9 | Question Image | |
| 10 | The sum of indicated terms of a sequence is called | A. Arithmetic series<br>B. Series<br>C. Harmonic series<br>D. None of these |
| 11 | Sum of n terms of a geometric series if \| r \| < 1 is | |
| 12 | The sum of n terms of a series is denoted by | A. d<br>B. n<br>C. S<sub>n</sub><br>D. a<sub>n</sub> |
| 13 | If $a_1 = a_2 = 2$, $a_n = a_{n-1} - 1$ (n > 2), then $a_5$is | A. 1<br>B. 0<br>C. -1<br>D. -2 |
| 14 | The series obtained by adding the terms of a geometric sequence is called | A. Infinite series<br>B. Arithmetic series<br>C. Geometric series<br>D. Harmonic series |
| 15 | If $a_n = 2n - 3$, write the first four terms | A. -3, -1, 1, 3<br>B. 1, 3, 5, 7<br>C. -1, 1, 3, 5<br>D. None of these |
| 16 | The sixth term of the sequence 1,3,12,60....is | A. 1500<br>B. 72<br>C. 2160<br>D. 2520 |
| 17 | -2, 1, 4, 7,.... is _____ | A. Harmonic sequence<br>B. Arithmetic sequence<br>C. Geometric sequence<br>D. Arithmetic series |
| 18 | For an A.P common difference d | A. Can be zero<br>B. May or may not zero<br>C. Cannot be zero<br>D. None of these |

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| 19 | If Sn is a definite number as $n \to \infty$,then the geometric series is | A. Convergent<br>B. Divergent<br>C. Oscillatroy<br>D. None of these |
| 20 | If x, y, z are the pth, qth, rth terms of an A.P. and also of G.P., then $x^{y-z}. y^{z-x}. z^{x-y}$eqals | A. xyz<br>B. 0<br>C. 1<br>D. None of these |